

Massachusetts Environmental Compliance

Draft Audit Protocol

Draft Version 1.0

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Introduction

In 1998, Massachusetts contracted with 21 Environmental Consulting firms to audit state facilities in support of the Clean State Initiative. Three major elements of work were specified in the contract:

- The audit criteria were to focus on state and federal environmental regulations and consultants were to identify all confirmed and or potential violations.
- Consultant firms were to develop Audit Protocols prior to beginning work
- The audits were to focus on complete facilities and were to be comprehensive and multi-media in nature

Consultants were required to submit audit protocols for approval prior to conducting audits. Agencies were given the option to select from the list of 21 consultant firms and to negotiate a best value contract. The agency and consultant were to then review and agree upon applicable protocols. Following that, the consultant was to perform a multi-media audit at all agency facilities, prepare a draft report for agency review, and meet with agency personnel to discuss findings and recommendations. The project was to terminate with the delivery of a final report to the contracting agency.

The following draft audit protocol is presented as a tool and should be amended to suit your individual needs.

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There are three major phases to an environmental audit:

1. Pre-audit activities
2. On-site activities and
3. Post-audit activities

1. Pre Audit Activities:

- Facility personnel: Fill out a pre-visit questionnaire. This prepares facility staff for the audit and allows the consultant audit team to become familiar with the facilities' potential for environmental impacts.
- Consultant: Review of relevant regulations based on questionnaire results. Perform a regulatory review and search published regulatory databases for facility non-compliance. The purpose of these activities is to assess and evaluate areas most likely to have regulatory compliance impacts in support of the development of a detailed audit protocol

2. On-site activities:

- Facility personnel will make available all records, policies, procedures, protocols and make access available to appropriate areas of each facility.
- Consultant will conduct a physical inspection of each facility, review on-site records, interview key facility personnel and evaluate current facility protocols, operations, and procedures.

3. Post Audit Activities:

- A debriefing will be conducted at the facility upon completion of the physical audit. The debriefing provides the opportunity to informally review audit findings prior to putting anything in writing and it provides an opportunity to rectify and clarify misunderstandings and inconsistencies between the audit team and facility staff. The post-audit debriefing also provides facility personnel an opportunity to immediately react to discoveries of conditions that represent an imminent hazard to health and the environment

Pre-Audit Activities

Identify Facility Background Information

- ✓ Maps
- ✓ Drawings
- ✓ Description Of Geology/Hydrology
- ✓ Flood Plains, Wetlands, Historical Sites
- ✓ Land Use
- ✓ Names And Phone Numbers
- ✓ Records Of Changes

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Identify Reports and Other Relevant Records

- ✓ Compliance Records
- ✓ Correspondents Citizen Complaints
- ✓ Audit/Inspection Records And Reports
- ✓ Inventory Records
- ✓ Monitoring Data
- ✓ Studies
- ✓ Manifests
- ✓ Contingency Plans, Spills Plans
- ✓ Permits
- ✓ Consent Decrees

Identify Pollutants and Waste Generation, Control, Storage, Transportation, Treatment and Disposal

- ✓ Description and Design Data For Pollution Control Systems
- ✓ Storage, Treatment and Disposal Facilities
- ✓ Source of Waste
- ✓ Bypass Conditions or Potential

Identify Requirements, Regulations and Limitations

- ✓ Permits
- ✓ Consent decrees
- ✓ Ordinances
- ✓ Status – LQG, SQG, VSQG, or TSDF

Federal Database Search

- ✓ Abandoned, Inactive or Uncontrolled Hazardous Waste Sites (CERCLIS)
- ✓ Emergency Response Notification System (ERNS)
- ✓ Industrial Landfill
- ✓ Municipal Landfill
- ✓ National Priorities List (NPL)
- ✓ Generators, Treatment Storage and Disposal Facilities (RCRIS)
- ✓ Civil Enforcement Filed
- ✓ Chemical in Commerce Information System (CICIS)

State Database Search

- ✓ Waste Disposal Sites (21E)
- ✓ State Hazardous Waste Sites (RCRA)
- ✓ Solid Waste Sites

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- ✓ Drinking Water Sources
- ✓ Clean State
- ✓ UST

On-Site Activities

Opening conference

- ✓ Audit Team and Facility Staff Introductions
- ✓ State Audit Objective
- ✓ Discuss Audit Type, Process and Scope
- ✓ Identify Areas to be Inspected
- ✓ Outline Procedures
- ✓ Outline Schedules
- ✓ Identify Records and Document to be Reviewed During Audit
- ✓ Review Health and Safety Requirements
- ✓ Review How Confidential Data will be Handled

Records/Document Review

- ✓ Citizen Complaints
- ✓ Compliance Reports
- ✓ Correspondence
- ✓ Inspection Records
- ✓ LDR Forms
- ✓ Log Books
- ✓ Manifests
- ✓ Medical Records
- ✓ Monitoring Data
- ✓ MSDS
- ✓ Past Audits
- ✓ Permits
- ✓ Plans and Specifications
- ✓ Procedures
- ✓ Training Records

Staff Interviews

- ✓ Identify Key Facility Personnel
- ✓ Schedule Ahead of Time Meet in Work Areas
- ✓ Confirm Interview Time

Physical Inspection

- ✓ Facility Use – Past and Present

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- ✓ Adjoining Properties type and Use -- Past and Present
- ✓ Above Ground Storage Tanks
- ✓ Air Sources -- mobile and stationary
- ✓ Asbestos
- ✓ Boilers
- ✓ Contaminated Sites -- Chapter 21E
- ✓ Drinking Water Quality – Cross Connections
- ✓ Drinking Water Supplies
- ✓ Discharges to Groundwater
- ✓ Federal Wetlands and Waterways Protection
- ✓ Hazardous Waste Storage, Handling and Disposal
- ✓ Medical Waste Handling and Disposal
- ✓ PCB Containing Transformers and/or other PCB Regulated Equipment
- ✓ Massachusetts Right to Know Compliance
- ✓ SPCC Plans
- ✓ Sewage and Septic System Discharges
- ✓ Solid Waste Disposal at Un-permitted Facilities
- ✓ State Water Management Program
- ✓ Underground Storage Tanks
- ✓ Universal Waste Rule Compliance
- ✓ MGL Chapter 91: Waterway Licenses
- ✓ Wetland Impacts
- ✓ Water Pollution and Stormwater Runoff

On-Site Post-Audit Debriefing

- ✓ Identify Actual and/or Imminent Threats to Health and the Environment
- ✓ Identify Actual Non-compliance
- ✓ Identify Potential Non-compliance
- ✓ Identify and Discuss Information Gaps
- ✓ Identify and Discuss Unclear Audit Findings

Data Management

Records

- ✓ Index
- ✓ Facility Records
- ✓ Correspondence
- ✓ Bound Notebook
- ✓ Protocols and Checklists
- ✓ Photographs (include date, time, what, when, and other specific information)
- ✓ Sampling records
- ✓ Follow up data collection

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Audit Report

Minimum Requirements

- ✓ Executive Summary
- ✓ Facility Map
- ✓ Scope and Objective
- ✓ Facility Profile
 - Facility Name
 - Facility Location (city/town)
 - DEP Region
- ✓ Audit Findings Summary
 - Location within the facility
 - Procedural Deficiency
 - Regulatory Deficiency
 - ◆ Imminent Hazard (Y/N)
 - Finding Category
 - ◆ Above Ground Storage Tanks
 - ◆ Air Sources -- mobile and stationary
 - ◆ Asbestos
 - ◆ Contaminated Sites -- Chapter 21E
 - ◆ Drinking Water Quality – Cross Connections
 - ◆ Drinking Water Supplies
 - ◆ Discharges to Groundwater
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 - ◆ Universal Waste Rule Compliance
 - ◆ MGL Chapter 91: Waterway Licenses
 - ◆ Wetland Impacts
 - ◆ Water Pollution and Stormwater Runoff
 - Corrective Action Recommendation
 - Action Options
 - Estimated Costs
 - Timeline to Correct

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Other Report Information

- ✓ Locus Map
- ✓ Photographs
- ✓ Regulatory Inspection Reports